

Petr Stepanov

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Ph.D. graduate in physics with 5+ years of expertise in the user interface (UI) and user experience (UX) design. Strong web application and desktop software development skills.

Summary of Qualifications

Work Experience

C++ Software Developer

[Thomas Jefferson National Laboratory \(JLab\)](#), Newport News, VA, USA.

Jul 2020 - Dec 2022

Software Developer • Postdoctoral Researcher

[Catholic University of America \(CUA\)](#), Washington, DC, USA.

Jul 2020 - Dec 2022

Software Developer • Research Assistant

[Bowling Green State University \(BGSU\)](#), Bowling Green, OH, USA.

Aug 2014 - May 2020

- Wrote three desktop GUI programs for spectra fitting and interpretation (C++, CMake, ROOT, Qt, Java)
 - GitHub repositories contain over 10k lines of code in total: [TLIST Processor](#), [SW Calculator](#), [RooPositron](#).
 - Extended default ROOT GUI library (Qt-based) to support the MVP design pattern.

UI/UX Designer, Frontend Developer • Freelance

Sep 2012 - May 2020

- Designed and built an online e-commerce store [Sticker Store LLC](#) with a static website generator (Figma, Hexo, Snipcart, Bootstrap, SASS, Express.JS, EJS, Node.js).
 - Improved the Google PageSpeed Insights metrics (CLS, LCP) up to 97%.
 - Created a recursive script to export over 300 products from YAML file to Google Merchant.
 - Optimized SEO. The project reached over 1400 organic monthly users.
- Made iOS application (Swift, UIKit, storyboards) for the [We.Team](#) messenger (more than 3k monthly downloads in AppStore). Participated in cloud-based messenger development with enhanced file sharing capabilities (HTML, React JS, SASS).
- Migrated the landing page for [Sweetbridge](#) company from WordPress to Jekyll static site generator (Ruby, CSS). This resulted in a 70% improvement in the page load time.
- Developed the front-end part (Angular.js, HTML, LESS) for [Lili Social](#) network.
 - Assisted with iOS mobile application (Ionic).
 - Enabled SEO crawling of over 1000 Angular.js pages with Google bot.
- Web design.
 - Designed logos, UI/UX prototypes (Figma, Sketch, Illustrator) and branding identity for over [10 different companies](#).
 - Converted numerous design assets and mockups into responsive HTML and CSS.
 - Mocked up and integrated dozens of cross-browser responsive email templates.

Web Designer, Full Stack Web Developer

[Gridnine Systems](#), Moscow, Russia.

Apr 2011 - Aug 2014

- Prototyped and designed interactive mockups for [Otixo](#) cloud file integrator (Balsamiq, Adobe Creative Suite). Utilized Google Web Toolkit (GWT) Model-View-Presenter (MVP) framework to develop application frontend (JavaScript, responsive CSS).
- Responsible for the front-end development of the [ATH American Express](#) – the largest travel management company in Russia (JavaScript, Backbone.js, and RequireJS). Increased the front-end load time by over 30%.
- Implemented image processing servlets on the backend to generate banners for five different social networks (PHP, ImageMagic).
- Wireframed and sliced to web pages numerous UI/UX mockups for web applications (Balsamiq, Photoshop, HTML and CSS).

Computer Science Teacher

[Phys-Tech College at MIPT](#), Moscow, Russia.

Oct 2009 - May 2011

- Provided instructions and guidance to high school students on following computer courses: C/C++ programming, HTML, Adobe Photoshop and 3D Studio Max.

Research Scientist

[Institute for Theoretical and Experimental Physics \(ITEP\)](#), Moscow, Russia.

Sep 2008 - Apr 2011

- Application of positron lifetime spectroscopy for studying the radioactive-induced defects in steels. Monte-Carlo particle simulations with Fortran 95. Maintaining software for CAMECA tomographic atom probe (MSVC). Application of CERN ROOT libraries for fitting and analysis of experimental spectra.

Education

Bowling Green State University (BGSU) • Ohio, USA

Aug 2014 - May 2020

Ph.D. in Photochemical Sciences • GPA 3.423. Novel developments in positron annihilation spectroscopy techniques—from experimental setups to advanced processing software. [View manuscript](#).

British Higher School of Art and Design (BHSAD) • Moscow, Russia

Dec 2011 - Feb 2012

Three-month intensive course in Graphical Design and Visual Communications. Lectures and hands-on experience in graphic design and user interfaces.

Professional Networks

- Find examples of my code [on GitHub](#) (50+ repositories).
- Discover my professional contacts [on LinkedIn](#) (200+ connections).
- Check out my UI design portfolio [on Dribbble](#) (50+ shots).

Interests

- Hosting an open-source project for keyboard remapping on Linux [300+ stars on GitHub](#).
- Contributing to the C++ open source framework ROOT. Created two shared libraries to facilitate data analysis. Links to GitHub: [CanvasHelper](#) and [RootUtils](#).